

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Patent Profiles 	 JP11354136A2: FUEL CELL, SEPARATOR FOR FUEL CELL, AND MANUFACTURE THEREFOR View Images (1 pages) View INPADOC only
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Kind:	A2 Document Laid Open to Public Inspection
Inventor(s):	TASHIRO AKITSUGU HASUDA HARUFUMI SEKI TOMONORI FUJITA ATSUSHI
Applicant(s):	HITACHI CHEM CO LTD News, Profiles, Stocks and More about this company
Issued/Filed Dates:	Dec. 24, 1999 / March 17, 1999
Application Number:	JP1999000071779
IPC Class:	H01M 8/02; H01M 8/10;
Priority Number(s):	April 7, 1998 JP1998000094441
Abstract:	<p>Problem to be solved: To easily manufacture a separator, excellent in electrical resistance, gas permeability, liquid swelling properties, and mechanical strength, and satisfactory in moldability, by molding expanded graphite powder having a specific average grain size and mixed with a resin.</p> <p>Solution: Expanded graphite powder having an average grain size of 50 μm or more is previously manufactured and mixed with a resin, and the mixture is molded into a separator. If the average size of the expanded graphite powder is less than 50 μm, the separator is larger in electrical resistivity and inferior in mechanical characteristics, and therefore 80 to 500 μm is preferable. As the expanded graphite powder, expanded graphite having worm-like shapes and compression characteristics, can be obtained, for example, by immersing graphite in a solution with an acid constituent, thereby producing a graphite interlayer compound, rinsing the graphite, and rapidly heating it so as to cause graphite crystals to extend in the C axis direction. This graphite is worked into a sheet-like shape and then pulverized. As the resin, a non-solvent liquid epoxy resin, a solid epoxy resin, a melamine resin, an acryl resin, a phenol resin, a polyamide resin, and the like are used.</p> <p>COPYRIGHT: (C)1999,JPO</p>
Other Abstract Info:	CHEMABS 132(05)052411Y CHEMABS 132(05)052411Y
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(57) Abstract:

PROBLEM TO BE SOLVED: To easily manufacture a separator, excellent in electrical resistance, gas permeability, liquid swelling properties, and mechanical strength, and satisfactory in moldability, by molding expanded graphite powder having a specific average grain size and mixed with a resin.

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